## **AMENDMENTS TO THE CLAIMS**

## Claims 1-13. (Canceled)

14. (New) A pipe separator for separation of oil, gas and water in connection with extraction and production of oil and gas from formations under a sea bed, comprising:

an extended, tubular separator body having a diameter at inlet and outlet ends that is mainly equal to or slightly greater than a diameter of a transport pipe to which said separator body is connected;

a separator device upstream of said separator body for separation of gas; and an electrostatic coalescer incorporated in and constituting an integrated part of said separator body, said electrostatic coalescer including an upper electrode and a lower electrode in a wall of said separator body such that said upper and lower electrodes are to be supplied with an electric voltage so as to establish a vertical electric field within said separator body.

- 15. (New) The pipe separator according to claim 14, wherein said separator device comprises a cyclone separator.
- 16. (New) The pipe separator according to claim 15, further comprising:
  a water seal downstream of said separator body; and
  a device in communication with said water seal for drainage of water that is separated out in said separator body.
  - 17. (New) The pipe separator according to claim 16, further comprising: another electrostatic coalescer arranged in series with said electrostatic coalescer.

- 18. (New) The pipe separator according to claim 16, wherein said cyclone separator is in communication with a throttle valve that produces high shear for fluid.
  - 19. (New) The pipe separator according to claim 16, wherein said cyclone separator is in close proximity to the inlet end of said separator body.
  - 20. (New) The pipe separator according to claim 15, further comprising: another electrostatic coalescer arranged in series with said electrostatic coalescer.
- 21. (New) The pipe separator according to claim 15, wherein said cyclone separator is in communication with a throttle valve that produces high shear for fluid.
  - 22. (New) The pipe separator according to claim 15, wherein said cyclone separator is in close proximity to the inlet end of said separator body.
- 23. (New) The pipe separator according to claim 14, further comprising:
  a water seal downstream of said separator body; and
  a device in communication with said water seal for drainage of water that is separated out
  in said separator body.
  - 24. (New) The pipe separator according to claim 23, further comprising: another electrostatic coalescer arranged in series with said electrostatic coalescer.
- 25. (New) The pipe separator according to claim 23, wherein said separator device is in communication with a throttle valve that produces high shear for fluid.

- 26. (New) The pipe separator according to claim 23, wherein said separator device is in close proximity to the inlet end of said separator body.
- 27. (New) The pipe separator according to claim 14, further comprising: another electrostatic coalescer arranged in series with said electrostatic coalescer.
- 28. (New) The pipe separator according to claim 14, wherein said separator device is in communication with a throttle valve that produces high shear for fluid.
  - 29. (New) The pipe separator according to claim 14, wherein said separator device is in close proximity to the inlet end of said separator body.